

In the Claims:

1. (currently amended) A ferrule, comprising:

a molded ferrule body including a molded end face and defining a plurality of bores extending through the ferrule body for receiving end portions of respective optical fibers, the ferrule body further defining at least one opening through the molded end face adapted to receive an alignment member for aligning the end portions of the respective optical fibers with corresponding end portions of optical fibers of a mating ferrule, the opening defining a longitudinal axis extending at least partially through the ferrule body; and

wherein the ferrule body ~~comprises~~ has an integrally formed geometry feature that defines a reference plane for determining the angularity of a plane defined by the molded end face; and

~~wherein the molded end face is not machined subsequent to molding the ferrule body.~~

2. (previously presented) The ferrule of claim 1, wherein the geometry feature is selected from the group consisting of a geometric reference feature, a reference datum, a measurement datum, a polishing angle, and the molded end face, wherein the molded end face comprises a first surface and a second surface, and wherein the first surface is normal to the longitudinal axis defined by the opening and the second surface is disposed at a predetermined angle relative to the first surface and the longitudinal axis.

3. (previously presented) The ferrule of claim 1 further comprising at least one bumper extending from the molded end face.

4. (currently amended) A ferrule, comprising:

a molded ferrule body including a molded end face and defining a plurality of bores extending through the ferrule body for receiving end portions of respective optical fibers, the ferrule body further defining at least one opening through the molded end face adapted to receive an alignment member for aligning the end portions of the respective optical fibers with corresponding end portions of optical fibers of a mating ferrule, the opening defining a longitudinal axis extending at least partially through the ferrule body, the ferrule body further defining a molded geometric reference feature on an exterior surface of the ferrule body; and

~~wherein the molded end face is not machined subsequent to molding the ferrule body; and~~

wherein the geometric reference feature eliminates the need for using a truncated precision measurement pin to determine the angularity of a plane defined by a region of interest on the molded end face of the ferrule body.

5. (previously presented) The ferrule of claim 4, further comprising at least one bumper extending outwardly from the molded end face of the ferrule body.
6. (previously presented) The ferrule of claim 5, wherein the geometric reference feature is located on the at least one bumper.
7. (previously presented) The ferrule of claim 4, wherein the geometric reference feature is recessed on the ferrule body relative to the molded end face.
8. (previously presented) The ferrule of claim 4, wherein the geometric reference feature protrudes from the molded end face.

9. (previously presented) The ferrule of claim 4, wherein the geometric reference feature is disposed within the at least one opening.
10. (previously presented) The ferrule of claim 4, wherein the geometric reference feature is accessible for making visual measurements when the alignment member is received within the opening through the molded end face without the use of an interferometer having 3D capabilities.
11. (previously presented) The ferrule of claim 4, wherein the geometric reference feature is not altered throughout the useful life of the ferrule.
12. (currently amended) A multifiber ferrule for a fiber optic connector, the ferrule comprising:

a molded ferrule body including a molded end face comprising a precision molded first surface defining a first plane that is generally normal to a longitudinal axis of the ferrule body, and a molded second surface defining a second plane disposed at a predetermined angle relative to the molded first surface and the longitudinal axis of the ferrule body, the ferrule body further defining a plurality of bores extending through the ferrule body for receiving end portions of respective optical fibers, the ferrule body further defining at least one opening through the molded end face adapted to receive an alignment member for aligning the end portions of the respective optical fibers with corresponding end portions of optical fibers of a mating multifiber ferrule; and

wherein the molded end face is not machined subsequent to molding the ferrule body.

13. (previously presented) The multifiber ferrule of claim 12, further comprising a geometric reference feature operable for measuring the angularity of a plane defined by a region of interest on the molded end face; and

wherein the geometric reference feature is accessible for making visual measurements after assembly of the fiber optic connector without the use of an interferometer having 3D capabilities, thereby eliminating the need for using a truncated precision measurement pin to measure the angularity of the plane defined by the region of interest on the molded end face.

14. (currently amended) A method for determining the angularity of a plane defined by at least a portion of an end face of a ferrule, comprising:

providing a ferrule having a ferrule body, an end face and a geometric reference feature on an exterior surface of the ferrule body proximate the end face and integral with the ferrule body;

~~measuring a reference plane defined by the geometric reference feature;~~

~~measuring the plane defined by the at least a portion of the end face of the ferrule; and~~

comparing a reference plane defined by the geometric reference feature and the plane defined by the at least a portion of the end face of the ferrule to determine relative angularity
~~determining at least one end face angle based upon an angular difference between the reference plane defined by the geometric reference feature and the plane defined by the at least a portion of the end face of the ferrule.~~

15. (currently amended) The method of claim 14, wherein the geometric reference feature is accessible during the comparing step ~~measuring steps~~ for making visual ~~measurements~~ comparisons without the use of an interferometer having 3D capabilities.

16. (currently amended) The method of claim 14, wherein the ~~measuring~~ comparing ~~step~~ eliminates the need for using a truncated precision measurement pin to determine the end face angle of the ferrule.

17. (previously presented) A method of forming a ferrule, comprising:

molding a ferrule body comprising an end face and defining a plurality of bores extending through the ferrule body for receiving end portions of respective optical fibers, the ferrule body also defining at least one opening through the end face adapted to receive a guide pin for aligning the end portions of the respective optical fibers with corresponding end portions of optical fibers of a mating ferrule, the opening defining a longitudinal axis extending at least partially through the ferrule body; and

wherein the ferrule body comprises a geometry feature on an exterior surface of the ferrule body that is formed by molding and is not subsequently machined.

18. (previously presented) The method of claim 17 wherein the geometry feature is accessible for making visual measurements without the use of an interferometer having 3D capabilities, thereby eliminating the need for using a truncated precision measurement pin to determine the angularity of at least a portion of the end face of the ferrule.

19. (previously presented) The method of claim 17, wherein the geometry feature is selected from the group consisting of a geometric reference feature, a reference datum, a measurement datum, a polishing angle, and an end face comprising a first surface and a second surface, wherein the first surface is generally normal to the longitudinal axis and the second surface is disposed at a predetermined angle relative to the first surface and the longitudinal axis.

20. (previously presented) A method of forming a multifiber ferrule for a fiber optic connector, comprising:

molding a ferrule body comprising an end face and defining a plurality of bores extending through the ferrule body for receiving end portions of respective optical fibers, the ferrule body also defining at least one opening through the end face adapted to receive an alignment member for aligning the end portions of the respective optical fibers with corresponding end portions of optical fibers of a mating multifiber ferrule, the opening defining a longitudinal axis extending at least partially through the ferrule body, the end face comprising a first surface defining a first plane that is generally normal to the longitudinal axis and a second surface defining a second plane disposed at a predetermined angle relative to the first surface and the longitudinal axis of the ferrule body, the ferrule body further comprising an integrally formed geometry feature proximate the end face; and

wherein the geometry feature comprises a reference surface that is accessible for making visual measurements after the alignment member is received within the opening through the end face defined by the ferrule body without the use of an interferometer having 3D capabilities; and

wherein the geometry feature eliminates the need for using a truncated precision measurement pin to determine the angularity of a plane defined by a region of interest on the end face.

21. (previously presented) A fiber optic connection comprising:

a first molded ferrule body including a first molded end face and defining a first plurality of bores extending through the first molded ferrule body for receiving end portions of respective optical fibers, the first molded ferrule body further defining at least one opening through the first molded end face adapted to receive an alignment member for aligning the end portions of the respective optical fibers with corresponding end portions of optical fibers of a mating ferrule, the

opening defining a longitudinal axis extending at least partially through the first molded ferrule body, wherein the first molded end face is unmachined;

a first plurality of optical fibers positioned in the first plurality of bores;

a second molded ferrule body including a second molded end face and defining a second plurality of bores extending through the second molded ferrule body for receiving end portions of respective optical fibers, the second molded ferrule body further defining at least one opening through the end face adapted to receive an alignment member for aligning the end portions of the respective optical fibers with corresponding end portions of optical fibers of a mating ferrule, the opening defining a longitudinal axis extending at least partially through the second molded ferrule body, wherein the second molded end face is unmachined; and

a second plurality of optical fibers positioned in the second plurality of bores, each of the second plurality of optical fibers in contact with a respective optical fiber of the first plurality of optical fibers.

22. (previously presented) A connection in accordance with Claim 21 further comprising:

at least one first bumper extending from the first molded end face; and

at least one second bumper extending from the second molded end face.

23. (previously presented) A connection in accordance with Claim 21 further comprising:

a first integrally formed geometry feature on an exterior surface of the first molded ferrule body; and

a second integrally formed geometry feature on an exterior surface of the second molded ferrule body.

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